

Cool Tunes Contest

Keynote

**DIGITAL DESIGN
CONTEST**

See Page 54

Toronto computes!

The technology lifestyle magazine

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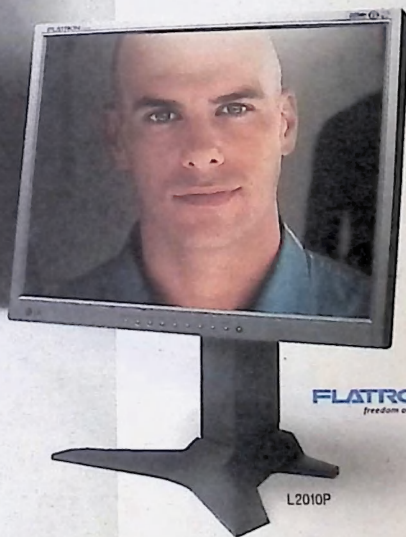
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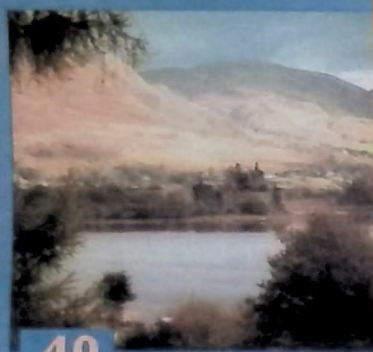
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**14****23****40****45**

c o n t e n t s

Features

- 14** A question of options
- 16** Show your pictures off on the Web
- 18** How to: Scan prints to archive
- 18** Optimizing images for printing
- 20** Media levy: Hearings end, saga continues
- 40** Picture this: Image libraries online

Reviews

- 26** Easy corrections get tricky
- 27** The small and efficient A303
- 30** Canon i850: Good results at a great price
- 31** Programs to solve your photo woes
- 32** Few new tricks in Quicken upgrade
- 36** Apple presents: Keynote 1.0

Regulars

- 6** Letters
- 8** New Products
- 10** News Briefs
- 37** Linfield's Line by Kevin Linfield
- 38** The World is My Cubicle by Alan Thwaites
- 41** Mac Chronicles by Dwayne R. Brown
- 43** Kids: The newest math twister
- 54** Profile: Blaine Manning

CreativeTech

- 21** Adventures in digital video: Rock steady, baby — or not
- 22** Digital Words: Making sense of dots
- 24** Digital Shots: Up close and personal
- 25** Musical Odyssey: The keyboard and the computer

Cyberplay

- 44** Cyberbriefs
- 45** Another FIFA soccer game
- 46** Civilization III: Play The World
- 47** O.R.B.: Off-World Resource Base
- 48** PC gaming: What's coming ...
- 49** NBA Live 2003
- 50** Game On! by Marc Saltzman

C O N T E S T S

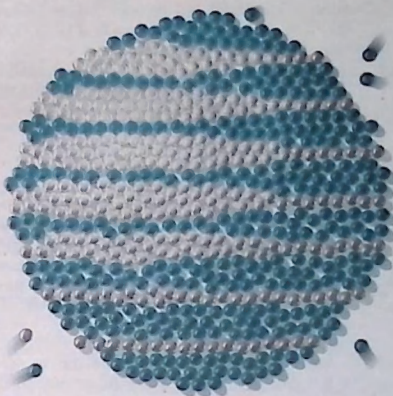
See page 40 for details on the Cool Tunes Contest.

Check out page 45 for info on a new Photo Spree Assignment.

Or how about entering that cool piece of artwork you did in our Digital Design Contest. See page 54 for details.

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April 2003



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Wow, are computers ever cheap. Inexpensive, that is. Sitting here in the editorial department of *Toronto Computes!* we realize that prices are tumbling down, but you only come face to face with it when you go to a store and buy a system.

I recently had to do just that. My mom needed a computer upgrade. We decided that a complete system would be better suited because upgrading individual components on her current machine was fraught with

risks and might be more hassle than it was worth. She had an original Pentium machine with a motherboard that had integrated video and sound. No AGP slot for a video card. Two PCI and two ISA slots. Like the song says, "Know when to walk away and know when to run."

Since the computer needs of my mom are modest, the computer we got for her was a 1.2 GHz machine with 256 MB of memory, a large and fast hard drive, and integrated sound, video, and a network adapter. The price with tax was a tad over \$500. We paid another \$50 for a refurbished 15-inch monitor, as the old monitor was really old — about 14 years. Folks, that ain't much for a machine that is very powerful. It will run any and all software that is out there, perhaps only stumbling a bit on some high-end games. It can do basic photo

editing, digital video editing, music recording, play MP3s, and a host of things only dreamed of about five years ago.

It used to be, about 10 years ago, that when buying a computer you had to budget about \$2,000 for a very good, but not top-notch, system. This system would last a couple of years at the most before it became obsolete and unable to run new software titles. The price for this high-middle tier of computer kept sliding downward, but the longevity of the machine did not really increase.

Once the processor speeds hit the 1 GHz mark about two years ago, things changed. CPU speeds have outstripped the requirements of software being made today. I have not encountered any software package that even recommends a 1 GHz CPU. What this means for the consumer is that the prices will, and are, tanking because the premium prices are charged on systems with 3 GHz processors. Good performing systems with processors under 2 GHz are a steal. Another bonus is that the computers consumers buy today will last longer because it will take software a very long time to break the 1 GHz barrier. (Who knows if this will even happen — oh my, am I getting into a limb here?)

The bad news is that as prices fall and the need to purchase a new computer every year or so diminishes, stores that sell computers go out of business. For the consumer, less stores means less competition and a rise in prices. However, the bargains that are available today will undoubtedly get more people buying their first computer.

Nestor Gula can be reached by e-mailing nestor@tcp.ca ♦

Reader Feedback

Re: Digital Shots: Flash something

Recently I had to take some pictures of improvements I made to my place. Getting close enough to show detail, the flash would wash everything out and of course there wasn't enough ambient light. So here's a tip: Put a layer or several of toilet/Kleenex tissue just over the flash to reduce and diffuse the light.

Cameron Kerr

Rebate only for persistent purchasers with immense amount of free time

Your review of *QuickTax* and *TarWiz* (TCI March 2003) was useful but one additional thing readers may be interested in and that reviewers are not in a position to spot, maybe, is the deceptiveness of the mail-in "rebate" ploy. In the case of *QuickTax* the method of

claiming the rebate after purchase is so mechanically complex and time-consuming, so demanding of information and multiple documentary proofs as to constitute at least a breach of good faith. *QuickTax* is making quite sure that only the most persistent purchasers with immense amount of free time on their hands will ever claim — or qualify for — the rebate.

How does *TarWiz* compare in this regard?

Michael Sidnell

Re: You can run, but you can't hide (TCI March 2003)

I used to laugh at "conspiracy theorists," claiming we're all being watched, all the time. However, as I grow older, I'm starting to think perhaps they have a point.

That's not to say I worry that I'm being watched by "the powers that be," but the thought that just about anyone can find out much of my personal information, needing only the time, know-how and desire to know, is disconcerting.

Most Internet users are small fish in a big ocean, and as such, aren't on the radar to be checked up on. As Alan Thwait said in his column, the very fact that we could be watched if some arbitrary person decided we're worth watching is worrisome.

I have also told my browser to warn me before accepting cookies; the extra few (or few hundred, as it were) clicks is a small price to pay to know — as well as we can know anyway — who wants to know about me.

Mary Galloway

Letter of the Month

For her letter this month, Mary Galloway wins a copy of *Tom Clancy's Splinter Cell* from Ubi Soft Entertainment. The most acclaimed Xbox game of 2002 comes to the PC with the same focus on stealth, the same challenging missions and the same involving gameplay. Players control Sam Fisher as he collects intelligence, neutralizes the enemy and destroys sensitive data, all without leaving a trace.



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Letters on issues raised in the paper or general computer issues are welcome. Please be brief. We regret that we are unable to make up stories from past issues, suggest products, or solve all your computer problems. All correspondence must include your full name in addition to your e-mail or snail-mail address. Letters may be edited for space or content.

Toronto computes!

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www.canadacomputes.com



A toothbrush for the serious

By ANDREW MOORE-CRISPIN

Say goodbye to Bluetooth

Business travelers with a taste for the bizarre and a foul taste in their mouths from airplane dishwasher (read: Coffee) will be interested to hear of the latest innovation to come out of the land of the rising sun.

A USB toothbrush has been released to Japanese consumers. No word on how long it might take for this innovation to reach Western soil.

The electric toothbrush plugs into a USB port, and is being marketed to busi-

ness travelers with a notebook computer. However, while it draws power from the USB port, no computing is actually involved – in other words, no detailed logs and pie charts detailing your brushing habits and no pop-up windows warning you that it's been 12 hours since you last brushed your teeth and that your breath is probably getting a little funky.

A similar product also currently available only in Japan is the USB coffee warming mug.

It is unclear whether Windows 98, with its lackluster support for USB devices, will require a driver download for either of these products.

The USB toothbrush retails for 1,280 Japanese yen, about \$16. No price could be found for the mug.

For the automobile audiophile

Getting MP3s from your home computer to your car has traditionally been difficult; too difficult, in fact, to make it practical.

Traditionally, automobile audiophiles would have to have a degree in computer engineering to develop a homebrew solution or deal with removable hard drives, multiple expensive MMC cards, burning MP3 CDs or inferior quality from a portable MP3 player using a tape deck adapter.

Kenwood, already famous for car audio, has a solution that makes you wonder why someone didn't think of it earlier.

The Music Keg MP3 player functions in much the same way as other car MP3 players and is wired into the in-dash deck. However, rather than having to control the MP3 playback on the actual player, as many solutions require, the Music Keg acts like a CD changer. Kenwood says the Music Keg's up to 999 playlists will be recognizable by most any deck that can control a CD changer.

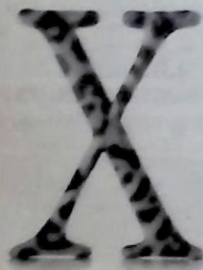
Other in-car MP3 players have users removing the hardware from the car to get new files on them or removing hard drives

that require users to install a docking bay in their home PC. The Music Keg uses removable, proprietary data cartridges, currently only available in 10 and 20 GB capacities. These cartridges (kegs?) are easily removed from the Music Keg and users can upload songs to them with the included PC cradle. With all this obvious innovation though, we have to wonder why the PC cradle connects via USB 1.0, without even offering a USB 2.0 or FireWire option. Be prepared to wait a while; 20 GB of data is going to take a long time to upload.

Digital instant, the next step

Polaroid instant cameras were, until digital came into its own, the only option for anyone wishing to take a picture and be able to see it a short time later.

Pictures taken on a Polaroid camera – or cameras from any of the other manufacturers that tried to get a piece of the instant pie – would take about a minute to develop, giving users access to prints without having to take a roll of film to the photo lab.



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Now, in an attempt to reclaim its spot at the top of the instant printing category, the company has released a digital camera that offers instant prints for the passport photo market at the Photo Marketing Association (PMA) trade show in Las Vegas.

The Polaroid Digital MiniPortrait Camera will be available in May and will carry a suggested retail price of US\$1,199. It features an on-board thermal printer capable of one-up image printing (one image on a sheet) as well as two-up - required for passport and citizenship photos - four-up and six-up printing.

The MiniPortrait camera also sports an over-sized 4-inch LCD preview screen to allow customers to complain about an image before it's printed, sure to be a popular feature with anyone who has dealt with taking passport photos before.



Mass media?

Also at the PMA show, Lexar Media announced the highest capacity CompactFlash card to date.

These new CompactFlash cards are available in two flavours, one, a Type I card, with a 2 GB storage capacity and the other, a Type II card, with a whopping 4 GB of storage.

While 1X (meaning 150 Kb/sec) is typically used as a measure for CD-ROM, being the read speed of the earlier drives, Lexar is using the measure for its CompactFlash cards, claiming a sustained write speed of 32X or 4.8 MB/sec.

The company says its new CompactFlash storage cards are capable of using Write Acceleration (WA) technology, which means faster sustained read and write speeds on cameras that support the technology, like Nikon's D1x, D1h and D100 cameras. These three cameras are professional models, and with Lexar's new cards retailing for US\$699.99 and US\$1,149 with a storage capacity greater than most any consumer would need, they are aimed at the pro photography market. ♦

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The biggest draws for those with a vinyl fetish ...

By ANDREW MOORE-CRISPIN

Drop the virtual needle

The biggest draws for those with a vinyl fetish might belong to a rather large dominatrix. The biggest draw for those with a vinyl (as a method of distributing music) fetish might be the ambient noise and warmer, more human feeling of a vinyl record.

Proponents of the vinyl record say digital recordings and the methods of their distribution, be it MP3, CD or MiniDisc, are sterile and lack the human feeling of a vinyl record.

To that end, Ofer Springer, a computer hobbyist, came up with a simple computer program that can take a scanned image of a vinyl record and act as a sort of record player needle, making a digital representation of the analogue media.

Springer is offering the source code on his Web site, Digital Needle (www.cs.huji.ac.il/~springer/) and admits that it is "both straightforward and crappy" in a response to some SlashDot (www.slashdot.com) users saying the Virtual Gramophone is a hoax.

Springer has some sample recordings and decodings taken from the vinyl record scans available for download on the Virtual Needle site. Most of the MP3 and WAV files offered require a very good ear and a bit of imagination to hear the connection with the source record, Vivaldi's *The Four Seasons*.

Springer scanned the record on a flat bed scanner in four parts (as an LP is too large to fit on the scanning glass), stitched them together in an image editor and used his Virtual Needle software to extract what is almost recognizable as music.

IT workers feeling anxious

While matchbook and television advertisements promise personal fulfillment, more money and as a result, less stress with a new IT career, it doesn't seem to be panning out that way.



A report issued by Warren Shepell Research Group suggests that while technology workers are generally young and well paid, they are more susceptible to being laid off as a result of corporate downsizing and, while some are employed full-time, the industry as a whole seems to prefer hiring on contract.

The report, titled "Organizational Health and Wellness Trends in Technology," also suggests that tech workers are more likely suffer from anxiety ... perhaps as a result of layoffs and contract work, though the study doesn't suggest a connection.

Those in the technology sector also adhere to the "work hard, play hard" school of thought, the study suggests, and are more likely than the national norms to smoke and have substance abuse problems.

It goes on to say that, as a generally younger work force, the sector fosters a progressive and respectful work environment where racial and cultural diversity are less of an issue than is the norm.

To see the five-page report, go to www.warrenshepell.com/research.

Wireless hotspots a hot topic

Intel is rolling out what the company is calling its biggest innovation since Pentium was released a decade ago.

The company kicked off its Centrino initiative with media events worldwide showcasing the new technology.

Centrino is Intel's new micro-architecture that incorporates WiFi (802.11b) into the processor core, allowing users to go online in any WiFi enabled Internet hotspot.

In line with the Centrino launch on March 12, Intel revealed its list of wireless enabled hotspots across Canada and the world, which can be viewed on Intel's Web site (www.intel.ca/product/mobiletechnology/hotspots/index.htm).

Toronto's list on the Intel site consists of 12 hotspots at the time of writing, including Toronto Union Station, Pearson Airport and the Croissant Tree, which is in the same building as the *Toronto Computes!* offices. In reality, there are already more than 12 hotspots in Toronto.

Industry analyst group IDC predicts there will be more than 118,000 wireless hotspots worldwide by 2005.

Intel says its Centrino processors are designed to use less battery power without sacrificing speed and make for thinner, lighter notebook designs.

Pat Gelsinger, Intel's chief technology officer, says we're still years from seeing his vision for 1-1-1-a notebooks (one inch, one day, one pound, always connected), but that Centrino is a step in the right direction.

Major notebook manufacturers, including Dell, Acer, Fujitsu, MDG Sony, IBM and TTX, were on hand at the media event to showcase their notebooks using Centrino technology. ♦

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A question of options

By MARA GULENS

It's a question every potential digital camera owner has to grapple with: Once you've got the camera, how will you get to the prints? Do you buy a photo printer and print in the comfort of your own home? Do you submit the images to a traditional photo lab and have someone else do the work for you?

For us children of the print photo age there's a third alternative that's hard to accept, but that's catching on fast: Forget printing entirely. Create virtual photo albums, upload images to the Web, hang right and wait for handheld media readers and flat screen monitors that let you display photos like paintings.

But for now, most of us still want some form of print that we can share. A framed 8x10 is still considered a gift from the heart and besides, Grandma can't do much with a photo CD. While we want our photos to look great and print fast, few of us want to spend hours messing with colour adjustment and red-eye correction. We're buying digital cameras because we want in on the advantages of this new method of photography, but that doesn't mean we want to give up the easy print process we've grown accustomed to.

What the printers have to say

Lori Abbott, category business manager for digital imaging for Hewlett-Packard Canada, says "people like the convenience of printing at home." Photo printers give instant gratification and allow photographers to be selective and "expand the possibilities of what they can do with images."

That said, people who print at home are not printing 12 or 24 pictures, they're printing one or two. "People who want to print more pictures will go to labs, because at home right now they are printing the one-offs," says Abbott.

Although Abbott says 35 mm cameras won't entirely disappear, she says people are migrating to digital cameras because they give users more control and allow for greater and easier photo sharing.

All right, so what about the relative of mine with concerns about a photo printer purchase? Won't the photos fade quickly? Is it worth the investment if she only prints a few images a month?

Abbott says new HP photo printers offer fade-resistant prints, better quality and better true-to-life colour than traditional silver halide prints. Moreover, digital images can be archived on a CD — which is an expensive option at a photo lab.

"The important thing to remember is that a photo printer is a versatile printer," she says. Its use is not restricted to photo printing — it can also be used for projects and presentations. That's a good thing to note because really, do you need a printer if you're planning to print only 24 images a year?

Over at Epson Canada, Tricia Pantry, product marketing specialist, says printers are already producing digital lab quality prints. But the three most important reasons why digital camera owners want a home photo printer is instant gratification (being able to print right now), personalization (create your own digital darkroom and work with image adjustment) and convenience (you don't have to go to the photo lab).

According to Pantry, more people are

taking more pictures than ever before. And, says Abbott, people who may have been intimidated about shooting images previously will now do so. But this all still begs the question — what if photo printing isn't really as simple as the photo printer people would have us believe?

A personal anecdote to make the point. Both my husband and I are comfortable with technology. Yet it has taken us months to figure out how to correct colour errors, use ICC colour profiles and it's taking us equally long to correct the images themselves. That's all before even getting to the print stage. Once we do print, how long do we want the prints to last? This last question could be the topic for another article: Maybe we don't need eternal prints anymore. After all, "one photo does not equal one print," says Pantry. While printing a photo has gotten easier, getting the image you print to look like you want isn't easy by a long shot.

According to Abbott, people tend to buy printers two to eight months after the purchase of their camera.

What the photo labs have to say

You've probably seen the photo lab ads promising customers they'll do it better, quicker and with less hassle. Plus, they offer archival prints.

Future Shop's Futurephoto.com senior manager Heather MacKenzie says she doesn't see the choice being between photo printers or labs, because "consumers will do both," she says. While printing at home is quick and "then and there," it's more costly and takes too much time when you have to print, say, 20 images from a recent trip.

As the digital camera market moves more mainstream, she also says it's not just do-it-yourselfers wanting to print, but consumers who like the convenience of having someone else do the work for them. While home printers are getting better, they're still not archival and once you've run through one print cartridge set and a package of good quality photo paper, you realize the cost.

That's not to say photo labs are what they used to be. "Price, quality and convenience" is being redefined. It's not just about that anymore — although it is, with new parameters. A big percentage of Futurephoto's business is generated online as customers upload images to the Web, order online and share prints over the Internet.



The future

So what's the future of photo printing? "With technology, things move so quickly it's hard to predict what will happen in six months," says Richard Greenberg, manager of Toronto's Kornercolor photo lab.

Greenberg says the current option is investing in a \$1,500 archival printer, or printing on \$100 to \$200 inkjets where the photos will not last. Labs, on the other hand, offer "the ability to print in a cost effective manner something that will last."

But things change rapidly. Software programs are becoming more intuitive, and "as the technology improves home users can make a cost effective print that lasts." More key, the generation of kids growing up with digital movies, images and music will have a much easier time working with digital manipulation programs. By the time today's infants start shooting pictures, "they won't know the old way," Greenberg notes.

So, check your finances, weigh in what you consider convenience and quality, consider how much control you want and have a look at long-term goals. At this point there's no one option, and the future is still not quite in focus.

"We're at the beginning of the digital era," says Greenberg. "It is really the true start now." ♦

Digital photo finishing — at the lab

Here's a new twist in the rapidly changing world of digital photography. HP and Phlogenix are set to test market the world's first Digital Inkjet Minilab in nine of Canada's Future Shop retail outlets.

DFK digital minilabs will be integrated with Future Shop's photo finishing management system. According to Phlogenix's Web site, the DFK "is a low-cost, scalable inkjet system ready to meet today's digital output demand, yet flexible enough to grow as the digital market expands." DFK input can include Internet digital file transfers, 35 mm film and PCMCIA cards; outputs can be standard prints, CD-ROMs, photo IDs and video.

Future Shop's interest stems from a commitment to exploring new directions in digital photo finishing and an interest in cutting costs — including alternatives to traditional silver halide photo finishing.

What comes to mind immediately is how this will impact consumer confidence in digital photo printers. If even photo labs start printing digital, well, that's yet another reason to consider it.

—Mara Gulens

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images isn't sufficient for printing. While the file sizes will get quite large (for example, a 4x6-inch uncompressed TIF file at 300 dpi in CMYK is about 8 MB), don't scripp on the resolution. Viewing the images only on screen might get the point across, but a higher resolution than is required for on-screen viewing is necessary if you want to make prints at a later date.

Create actions: Take a few minutes to program macros into your image editing software to cut down on the amount of actual work you have to do. For example, in *Photoshop*, the Actions window can be used to record a set of step-by-

step photo editing actions. Using our 4x6 example again, *Photoshop* can be told to re-size the file to 4x6 inches at 300 dpi, auto level, auto colour balance, convert to TIF, save to a specific location and any other editing functions you want it to perform. The beauty is that, once the scanning is done, you can hit a button, walk away and let your image-editing software do the work. Alternately, some programs allow you to program a series of actions and then follow them through step-by-step by hitting OK after each action. This allows you to make sure everything is going right, which it won't always. Auto-lev-

elling and auto-balancing can only do so much, and while they generally do a good job, neither can be entirely trusted.

Think assembly line: Rather than scanning each picture individually, image editing and archiving it, do each step many times in a row on all of your pictures. This way, things will go faster and, while it may be mind-numbing, it will be a more effective use of your time.

Get organized after the fact: All the work organizing piles of family photos for digital archiving is for naught if the pictures aren't organized for easy access later on your hard drive. Create folders on your hard drive for image categories.

Group images with a common element in one folder, so you'll know where to look for them later. For example, create a separate folder for wedding pictures, vacation pictures or seasonal pictures, or group together by approximate year.

Once these folders are created, burn some CDs of your images. Avoid the temptation to jam as much as possible on each CD-R. Spanning one folder over multiple CDs is fine, or putting multiple smaller category folders onto one CD-R. However, the order can start to break down and the archive CDs can get confusing if maximizing data space is given priority over organization. ♦



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Adventures in digital video: Rock steady, baby – or not

By LEE RICKWOOD

Last time, we spoke about camera composition and framing. The appropriate spacing around key picture elements helps make your image more inviting and engaging.

Head room (the space from the top of a subject's head to the top of the frame) is important – but always follow your nose and be adventurous.

Of course, it's hard to maintain compositional balance if your camera's not balanced. If it's swinging wildly, so will the image. You may want that — or you may want to look at camera support equipment.

Tripods, monopods, steadicam-type technology – even built-in steady shot features – can help if you know how to best use them to your advantage.

When shooting video, there are two sources of movement: The subject and the camera. Usually, you keep the camera steady and allow your subjects to move. Perhaps you're videotaping a baby playing on the floor. Compose the shot and let the baby go.

But if the baby moves out of the frame, you follow the motion with a pan, moving it from side to side. It's one of the most common camera moves, but in most cases, you must use some kind of camera support gear to make it smooth.

After your camera, your most important video investment should be a good tripod, one that supports the full weight of your camera without wobbling, shaking or collapsing outright. That pretty much rules out inexpensive still camera tripods.

Video tripods support the camera on three legs. Usually, the legs are extendable so you can raise or lower camera height when setting up the tripod. Three-stage legs (that extend using three interconnected sections) are usually sturdier than two-stage. Lightweight carbon fibre and rugged anodized aluminum are popular construction materials.

Don't forget about your tripod's feet. Some slip into a fixed base of some sort, so the legs don't slide apart on a slip-

pery surface like ice or linoleum. Some tripod legs attach to a movable base on wheels, called a dolly, so the camera and tripod can be easily and smoothly moved as a unit (truck side to side, or dolly in and out), even while shooting.

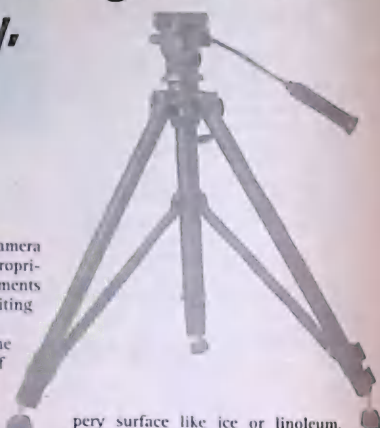
At the other end of the tripod, a fluid head is essential. The fluid head connects to your camera or camera plate. It moves on a cushion of oil, resulting in a very nice pan. The oil or other liquid smooths out bumps and evens out motion. Some tripods are adjustable, to add or subtract resistance on camera motion.

Monopods are single-stem camera supports; easy to carry, quick to setup, they provide stability above and beyond hand held, but they will not be as sturdy as a tripod.

Steady-on or tracker-type support gear lets you "wear" your camera — and create terrifically smooth tracking shots that follow characters or action almost anywhere. The original equipment required thousands of dollars, a lot of set-up, very specific operator training and more than a few good muscles. Significantly scaled-down versions are on the market now that still give enormous creative latitude to the camera operator — or wearer.

So pan your camera left and right, tilt it up or down, or combine the moves. But unless you have a good reason to do otherwise, rock steady is the best way to go. Of course you can shoot good video hand held, especially if the camera has good electronic (or even better) optical image stabilization. But for shots with a lot of zooming or action, a tripod is best.

Rules, as we've said before, are to be learned, understood and then broken. ♦



Media levy: Hearings end, saga continues

Hopefully, every computer user in the country is aware

of the Copyright Board of Canada hearings this past February

By FRANK LENK

These hearings were held to determine the revised amounts that would be paid to the music industry by purchasers of blank media over the 2003-2004 period.

Although there was a big buildup, they ended without fanfare. It's hard to tell how things went, but the recording industry may be ahead on points.

"I believe we presented our case more effectively than our opponents," says a confident David Basskin, president of the Canadian Musical Rights Reproduction Agency (CMRRA) and a director of the Canadian Private Copying Collective, which administers the controversial blank-media levy program.

"So often in litigation, it's not who's got the better case, but who is better prepared," he adds.

The chief opponent at the hearings was the Canadian Storage Media

Alliance (CSMA), composed of companies such as Apple Canada and Hewlett-Packard, and organizations such as the Retail Council of Canada (RCC).

Jacque Famulak, general counsel for Apple Canada and a spokesperson for the CSMA, confirms that the five-member Copyright Board panel heard presentations from lawyers representing CSMA, plus a separate delegation from the RCC.

Although hearings are open to the public, Basskin noted that almost no visitors attended, with members of the press particularly conspicuous by their absence.

The Copyright Board is not constrained to any timeline, but Famulak predicted that a decision would probably be announced by the end of March. However, it might not come until April or even May, and a final outcome could be further delayed if any of the concerned parties decides to appeal.

Adding it up

Although the final levy amounts are now up to the Copyright Board, it's notable that the CPCC made some late amendments in its requested rate schedule, in an apparent response to the chief criticisms leveled against its originally requested levy rates.

Most notably, the CPCC reduced the two most controversial rates: Those on memory cards "capable of being used in an MP3 player" (but also widely used in digital cameras and other devices) and those on hard drives built into MP3 players.

The originally-requested \$21 per gigabyte levy on hard-disk players would have obliterated the (legitimate) Canadian market for these products by doubling their retail price. The latest CPCC rate schedule requests only about half the original base rate and adds a diminishing scale for extra increments in disk capacity.

It's a complicated calculation (the extensive use of retail-style ".88" and ".89" amounts seems particularly odd), but it looks like a 20 GB player would now incur a levy of \$112.82, rather than the originally-specified \$420. A major improvement, to be sure, but still a hike amounting to about 28 per cent on the pre-tax retail price.

Secondly, for large companies resentful of paying a levy on legitimate data storage media, the CPCC has offered to expand its "zero-rating" scheme to include most types of technology companies.

Unfortunately, this will benefit only the largest organizations. To qualify for zero-rating, companies would have to register with the CPCC before purchasing discs levy-free from specific authorized sources and would have to file detailed annual reports of quantities, sources and uses of the media.

In any case, the CSMA isn't mollified. "You can zero rate as many people as you want, but haven't eliminated the fact that the laws need to be changed," says Famulak.

Paying it out

Perhaps not coincidentally, the CPCC announced just before the Copyright Board hearings that it had finally started distributing the levy funds it has collected over the past several years.

According to Basskin, more than 50,000 people will be paid for the 2001-2002 period. However, the current installment comes to only about \$7 million, out of the nearly \$30 million currently in the CPCC coffers. "We took a lot of criticism for the delay," admits Basskin.

Paying out fairly is difficult. "It became a kind of a King-Solomon-cut-the-baby-in-two approach," says Basskin. But he staunchly defends the CPCC use of both replay and album sales data as being the best available compromise.

"You have to assume there's a relationship between what is popular and what is being copied," he says, dismissing out of hand any suggestion that radio play might be financially influenced by music publishers themselves, and hence an inappropriate gauge of popularity.

Regarding levy pay-outs to non-Canadians, Basskin makes no apologies. "Canadians benefit from similar levies in many other countries," he points out. "If you start discriminating on the basis of national origin, it will quickly spread to other areas where Canadians benefit."

For consumers who may be concerned about levy funds leaching to the U.S., Basskin suggests a simple measure: "Don't buy any products made in America."

What's next?

After the Copyright Board decision is handed down, the Canadian Coalition for Fair Digital Access (CCFDA) will take over the long-term fight for copyright reform in general.

"We're continuing to meet with various officers in Ottawa to demonstrate that levies on blank recordable media are unfair," says CCFDA spokesman Allan Reynolds.

He adds that a parliamentary committee will be looking at various aspects of Canadian copyright law, under the aegis of Industry Canada and Heritage Canada. This group will probably start meeting within the next month or two.

"The times are changing, and there are going to be different ways of getting [content] to people," predicts Famulak. "The Copyright Act needs to change with the times." ♦

Read Total Gamer
Canada's premiere gaming magazine

The image shows the cover of 'Total Gamer' magazine. At the top, the title 'TOTAL GAMER' is written in a stylized, outlined font. Below the title is a large, detailed illustration of the character Fox from the 'Starfox' series, looking forward with a determined expression. He is wearing his signature orange and blue suit. In the bottom left corner of the cover, there is a small box with the text 'STARFOX ADVENTURES' and 'PLUS: Only 18 for everyone'. At the very bottom of the cover, the website 'www.totalgamer.ca' is printed in a large, bold font, followed by the tagline 'Total Coverage. All Platforms.' in a smaller font.

Digital Words: Making sense of dots ∴ ∴ ∴ ∴

By JEFF CHAPMAN

This magazine is putting one over on you. All the delicately shaded images with all their apparently subtle and seemingly infinite tints of grey, are actually just hundreds of tiny black dots. Peer at any of the images on these pages closely enough and you'll see. You may feel duped and swindled, but restrain your outrage: The publishers didn't really have any choice in the matter. Printers – finding it too troublesome and expensive to stock hundreds of barrels of differently shaded grey inks – take advantage of the notorious gullibility of the human eye and print the entire non-colour contents of the paper using only a series of black dots. When viewed from even a slight distance, our eyes blend these dots together so they appear as images.

The process by which a traditional black-and-white photograph is reduced from millions of shades of grey down to a single shade of black ink is called halftoning. Halftoning converts all the shades of grey found in a continuous-tone photograph into tiny patterns of

black dots and empty spaces. The fewer and farther apart the dots, the lighter the shade.

Halftoning simplified

In the days before everything went digital, publishers were traditionally obliged to hand over their photographs to printers or service bureaus for manual halftoning with large halftoning cameras and special halftoning screens. These days, almost all publishers employ scanners and computers to handle halftoning themselves.

Your computer's postscript printer driver normally handles digital halftoning automatically, although some software (including Quark and Adobe products) will allow you to specify halftone settings yourself.

Most people using the major desktop publishing programs will never notice the program automatically handling the halftoning in the background, but it is possible to tinker with the default settings for better results. The setting you're most likely to want to pay attention to and adjust is the aforementioned screen frequency, which is usually

measured in lines per inch (lpi). This setting specifies resolution in terms of the number of lines that the final output device can print on each inch of paper (line screen). Higher screen frequencies generally produce finer, more detailed final images, but unfortunately it isn't as simple as always using the highest possible screen frequency for the highest quality final product. If you specify a higher lpi than your final output device can handle all the extra pixels will be wasted at best or wreak havoc with your final output at worst.

Paper matters

More importantly, printing too many dots on certain types of paper will actually produce inferior results. All paper soaks up a certain amount of ink, causing each dot printed to swell a little through a process called dot gain. Glossy paper has lower dot gain than standard uncoated paper, which in turn has considerably less dot gain than newsprint. Since dot gain makes each black dot a little larger, causing each image to appear a little darker, the greater your output paper's dot gain, the fewer dots

you should send to the printer.

Glossy magazines can normally handle a screen frequency of around 133 lpi, whereas newsprint usually produces best results with around 85 lpi. Desktop computers and printers normally measure resolution in terms of dots per inch (dpi) rather than lpi, but calculating the number of dots per inch needed for a decent halftone is fairly straightforward. In cases where the final screen frequency will be 133 lpi or higher (a decent imagesetter and better-than-newsprint quality paper), the image resolution should be twice as high as the line screen (that is, a 266 dpi image is needed for a 133 lpi screen); in cases where the final screen frequency will be less than 133 lpi, the image resolution should be one-and-a-half times the line screen (that is, a 170 dpi image is needed for a 85 lpi line screen).

Desktop publishing software takes care of halftoning itself most of the time, but in some cases tinkering with halftone settings properly is essential to successfully tricking your readers into seeing meaning amid a sea of tiny black dots. ♦

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Digital Shots: Up close and personal

By ANDREW MOORE-CRISPIN

Beyond a simple documentation of events, photography can bring a new perspective to things we see every day. Let's talk about one of the less used functions of consumer level digital cameras: The macro mode.

The dictionary definition of macro is being large, thick or exceptionally prominent. This gives us a good clue as to what is involved in macro photography. Macro mode changes the focal length of your camera's lens so that instead of capturing a scene at large, photographers can take close up pictures of anything that catches their interest. Macro photography is also good training for your creative eye: Rather than taking a field trip to find scenes of visual interest, macro photography allows us to explore things that are familiar to us, but up close and personal, in all their detail and with new perspective.

All but the most basic consumer level digital cameras offer a macro mode, though it often goes unused.

Macro photography using a digital camera can't compare to the choices afforded to even the most basic SLR cameras — SLRs, with their interchangeable lenses and after market add-ons, go way beyond the ratio of 1:1 (where the original subject is captured at its actual size in the image) or possibly 1:2 (where the subject appears at twice its size) that digital camera macro settings typically offer.

across the ground or anything else that captures your interest and that you think will make a nice photo.

Once you are familiar with shooting macro photographs, you will find that you open yourself up to a lot of new possibilities for your pictures. Rather than just seeing the big picture, you will start to break it down into the sum of its parts and realize there is a wealth of interesting photographs to be had in one scene. Instead of taking a picture of an old locomotive in the station while on vacation, for example, think about the form of the wheels or the pistons that drive them, and add another level of interest to your vacation snaps. Perhaps people won't recoil in terror anymore when you invite them to look through your vacation pictures, as is the knee-jerk reaction.

Rather than documenting events to say: "I was here," macro pictures make viewers ask, "what is that?" And instead of taking in a scene with a quick glance, viewers pay more attention to catch the intricacies of the picture.

Technique

When dealing with close subjects, the smaller distance between the lens and the subject means less light can be captured. This, in turn, requires a larger aperture and slower shutter speed, which means we're losing depth of field (the amount of the scene that is in focus at once). This is why very close-up pictures have a blurred background. It's a nice side effect that really forces viewers to look at the central subject, but it makes focusing more difficult, as there is a much smaller margin of error. Combine this with the sometimes-spoty auto focus of consumer digital cameras and you can see where things might get a little difficult. If your camera offers it, manual focus is preferable to auto in macro photography, as the depth of field is so narrow and you know better than the camera which elements should be in focus. Otherwise, you will have to compensate for the camera and frame your pictures accordingly. As with all photography using a slow shutter speed, you will need very steady hands or a tripod.

Try picking one thing in particular out of a scenic photograph and giving it new perspective as a macro photograph. With a little experimentation, you will be pleasantly surprised at the results. ♦

Get familiar with macro

The main reason for photographers to go digital is that the medium allows more room for experimentation. We can instantly preview pictures and erase our mistakes. To this end, the best way to learn macro photography is to simply go out and try it. Macro photography requires that we look beyond what we're used to seeing and focus on one specific element of a whole scene.

For example, a picture of your garden in bloom is nice, but a lot of individual detail is sacrificed in favour of capturing the entire scene. As the old cliché says, take time to smell the roses, or in this case, get a close-up picture of them.

After you take a picture of your garden at large, try focusing on individual elements of it, like a flower in bloom, a pine cone going to seed, an ant walking

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CREATIVITY

A photograph of a vintage electronic organ, likely a portable model. It features a dark, possibly black or dark brown, rectangular body. The keyboard is visible, with white and black keys. Above the keyboard, there are several control knobs and switches, some of which are labeled with text like "TREBLE", "BASS", and "VOLUME". The organ is shown from a slightly elevated angle, and its overall appearance suggests it is an older, perhaps mid-20th-century, instrument.

MIDI is the key

want to connect your keyboard to your computer via MIDI. You can get a soundcard, like Creative Labs Audigy 2 Platinum, with MIDI ports built into it, or you can get external MIDI cables that connect to your existing soundcard's game port, like the MIDI Cable Pack from Voyetra.

of a button. The dynamics (force, length, decay) of the recorded music and individual notes will remain – just the sound will change.

Let's say you have a great old synthesizer, a classic like the Yamaha DX7, and you have a bunch of sounds on it that your computer can't duplicate. To record the keyboard you can simply connect the Audio out (or Line out) of the keyboard to your computer's microphone (or Line in). Your computer's soundcard will convert the analogue sound to a digital format, just like when you record a guitar or vocals.

A neat thing you can do is record or enter a MIDI track into your computer's music recording software, and once it is edited and perfected, send it out as a MIDI file to your keyboard or sound module (basically a synthesizer without the keyboard). The funky sounds of your keyboard will play what your computer tells it to, and you can record it at the

Virtual synthesizers

The latest rage in computer music is virtual synthesizers. These are computer programs that mimic, or emulate, synthesizers of old, or present a totally new experience in synthesizing or recreating sound. If you want a DX7 sound, you don't have to go through the elaborate steps listed above. Instead, just turn on *FM7* from Native Instruments and you have a DX7 in your computer. Any MIDI-equipped keyboard will now be able to sound like a DX7 (or any other synth) played through your computer.

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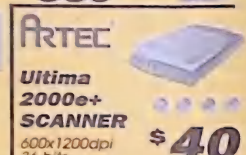
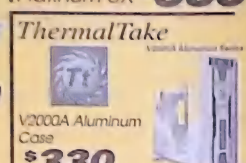
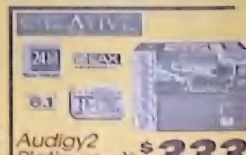
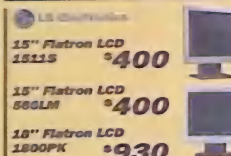
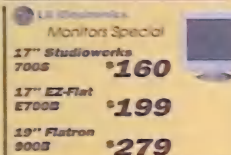
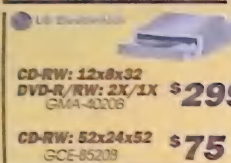
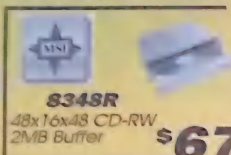
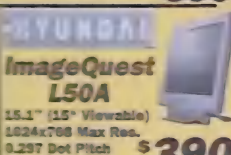
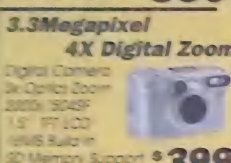
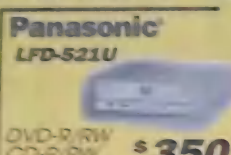
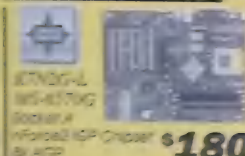
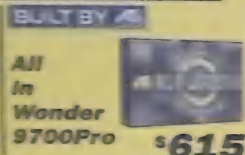
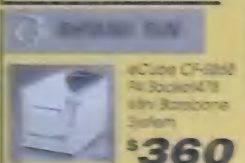
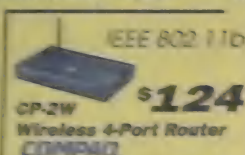
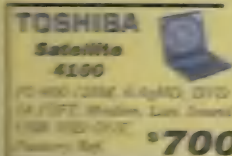
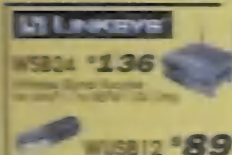
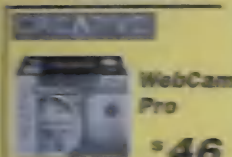
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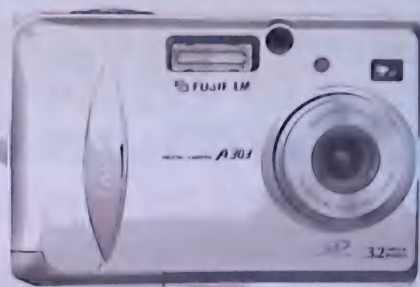
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By NESTOR GULA

You tend to take nice snapshots as opposed to creating photographs because of all the automation that is inherent in these small compact cameras. My resistance to this genre was eroded some years ago when I read that many professional photographers used point-and-shoot cameras for the "quick snap." I bought one used but never used it — preferring my regular cameras.

Consumer level digital cameras tend to be modeled on the point-and-shoot

The small and efficient A303

I've never been a big fan of point-and-shoot cameras, because I feel that they severely limit the options for a photographer.

model. The Fujifilm FinePix A303 is one such camera. Although not spy camera tiny, its dimensions are diminutive: 9.7x6.4x3.6 cm (3.8x2.5x1.4 in.). It is also very light, weighing only 145 g (5.1 oz.) without the batteries. The two AA batteries add less than 55 g (2 oz.), so even fully loaded the camera's weight is negligible. As with most digital point-and-shoot cameras, there is a small window that is used to point the camera in the proper direction or a 1.5-inch LCD screen. Prolonged use of this screen will greatly erode the battery power.

For its small size, the camera has some nice features. The A303 is a 3.2-megapixel camera, so the quality of the digital file is very good when used at the high resolution setting. It has a 3.2x optical zoom but no digital zoom. Since

digital zoom is in most cases useless, I consider this a good thing. The macro setting on this camera lets you focus from 10 to 80 cm (3.9 in. to 2.6 ft.).

Like many digital cameras, the A303 allows you to shoot and store digital movies. In this camera's case, you can shoot 60-second video clips in either 320x240 or 160x120 pixels at 10 frames per second. There is no sound on these recordings. I feel this is an unnecessary feature but it really doesn't interfere with the camera functions. Speaking of extraneous features — the A303 has video conferencing capabilities. This perhaps is great for those who are into video conferencing.

The thing I really liked about this camera is that most of the controls were on the back of it. One click of the large dial on the back switches the camera from macro to regular mode. The same

goes for setting the self-timer or going to the movie or picture viewing mode. There is also a flash button that easily lets you scroll through the various flash modes (auto, red-eye reduction, forced flash, suppressed flash, slow sync). It is great that you do not have to enter the menu system every time you want to switch to a new mode. Because it is designed as a simple camera, there is very little manual control over the exposures in the A303. You can adjust the exposure levels a bit, and the white balance, but that's about it.

This camera uses the new SD-Picture Cards, which are about the size of a regular postage stamp. It comes with a 16 MB card that is barely adequate for shooting at the highest resolution setting. XD cards currently come in sizes up to 128 MB and have the capability of eventually holding up to 8 GB.

more INFO

FinePix A303
\$549
Fujifilm
www.fujifilm.ca

Easy corrections get tricky

By MARA GULENS

Picture It! Photo Premium 7.0 fits somewhere between Microsoft's photo editing software for absolute novices and its higher end package, Picture It! Digital Image Pro, which has way more templates and plug-ins, and is for users who want to go as far as creating company letterheads and magazine covers.

Since I'm still pining for a piece of software I had that did the job quickly and efficiently, but no longer works with my system, I gave Picture It! Photo Premium many chances over the past few weeks — because I really wanted it to work.

And with the basics, it does. Picture It! takes the work out of uploading pictures to your computer: Just connect the cable from your digital camera to the PC and specify that you always want to send images straight to photo editing. Because, really, the primary thing people with too little time on their hands want to do is crop pictures, take care of red-eye and maybe fix up what's left of the background so the image is ready to be posted on the Web, printed or archived.

The cropping is easy enough — I just

wonder why image size can't be automatically adjusted to a standard 4x6 inch size — many people still like printing out photos that fit albums and frames. Red-eye removal is also basic and easy — zoom into the picture, pop the little circles on the eyes and you're done. (Much better than some software I've tried, which has the user draw the circles).

Everything else after that, however, was both simple and a mystery. I'll be the first to admit that while I can handle the video tutorials and a bit of reading about how stuff works, I really want to just be able to do it without thinking. Hence, I stick with Premium even though the next level could probably do so much more.

With Picture It!, for example, I could never really understand the frames on the bottom and the side, and kept going back to the My Pictures folder to see what had landed where. When I saved various layers after, for example, cutting out images and adding backgrounds, it was hit and miss as to whether I could fuse them together to create the fantastic image I was aiming for.

On the up side, it's nice to have a package that comes with a library of back-

grounds, frames and patterns, so that once you get inspired to do more with what you have, the tools are at hand. You can also use your own images as backgrounds and frames, but again, I'm not planning on doing this as a profession, so what's there doesn't count.

There are 1,500 templates to get you started, with everything from cards, to calendars, to labels and business cards, which will really get you excited about what you can do with the images you've accumulated. Indeed, it makes you think that the meaning of the photograph is changing along with the software we get in order to correct and enhance it.

Case in point: For the past year, the best pictures of my extended family have been the ones that are part of the calendar hanging on the bathroom door. We look at those way more often than we do at the photos in albums (which, by the way, isn't even an option because we haven't managed to get as far as putting the photos in albums).

My final test before writing this review was to take photos shot yesterday, upload them and see how quickly I could correct and enhance. No surprise, everything outlined above was con-

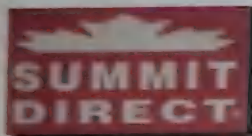


firmed twice over. Correction was done in a flash. Enhancement, on the other hand, got tricky when I lost the images in the folder and couldn't quite get the cut-out to fit in the frame.

more INFO

Picture It! Photo Premium 7.0
\$74.95
Microsoft
www.microsoft.ca

Requirements:
Windows 97/98/2000/ME, 300 MHz processor
(500 MHz or higher recommended), 64 MB
RAM (128 MB or higher), 220 MB hard disk
space, Internet Explorer 4 browser, or CD-
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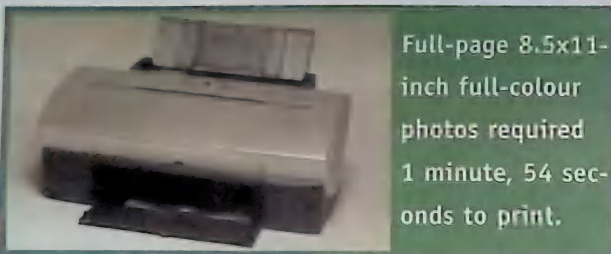
Canon i850: Good results at a great price

By DAVE CHAPPELLE

Canon's latest photo printer has a print head capable of putting 2 picolitre ink drops on paper. How big is 2 picolitres? Canon officials told us one-eighth-inch the cross sectional area of a human hair represents approximately 2 picolitres. Naturally, we didn't whip out our trusty electron microscope to measure, but we did manage to print off some decent images. (And to you engineers and fellow geeks, we know a cross section represents area while a picolitre is a measure of volume; please refrain from bombarding us with your e-mailed objections, okay?)

The new 1,600-nozzle print head is supposed to eject the precise amount of ink required, to increase speed and efficiency. Maximum resolution is 4,800x240 dpi, Canon claims 22 pages per minute in black and 14 ppm in colour. Those are good speeds, and if it's quality photos you're after, it's going to be faster than traveling to have your film developed. Full-page 8.5x11-inch full-colour photos required 1 minute, 54 seconds to print.

Results were pleasantly surprising,



Full-page 8.5x11-inch full-colour photos required 1 minute, 54 seconds to print.

even from older digital camera images. The software allows you to tweak the image slightly for better output. To avoid frustration and disappointment, make sure you select the correct settings, especially paper type, before printing a photo. Also, make sure you've used the correct kind of photo paper. Canon makes Photo Paper Pro, which gave us the most impressive images. Even plain paper worked well. Some competitors glossy papers proved disappointing on this printer.

Slots to input camera media directly would be nice, but we don't really expect them yet in this price range. The

silver chassis looks very sleek and modern when the printer is closed up. With input and output trays opened and fully extended it measures 42x54x27 cm. The i850 uses four separate cartridges in the standard CMYK (cyan, magenta, yellow, black) system. Cartridge insertion and removal is easy. Single cartridges can be replaced as they empty, instead of having to change all at once.

The i850 connects via parallel and USB. Mac users get their own instruction pages. By following instructions in the Quick Start Guide, we were printing in a few minutes on our Windows XP system. If your digital camera is

equipped with Exif (Exchangeable Image File Format) 2.2, the i850 will support this standard.

To help with your creative endeavours, Canon bundles four applications: EasyPhotoPrint allows simple editing, including the making and printing of borderless full-page prints from recorded images; ZoomBrowser EX displays images as thumbnails for easier selecting; you can perform very basic editing functions with PhotoRecord as well as adding frames and backgrounds to your images; PhotoStitch lets you merge separate images, taken consecutively, into a single panoramic image. ♦

more info

i850 Bubble Jet Printer

\$229

Canon

www.canon.ca

Requirements:

CD-ROM drive

Mac OS 9.2x, USB, 30 MB disk space

Mac OS X 10.1 or later 100 MB disk space

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Win XP, 2000, (NT 4 parallel only) 50 MB disk space

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Programs to solve your photo woes

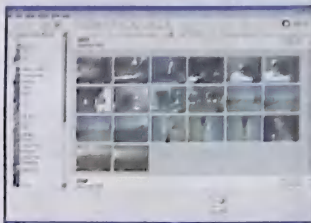
By NESTOR GULA

Find photos MIA on your drive

If you are like most digital camera owners, you have hundreds of photos on your hard drive. If you are not typical, then you are well organized and your photos all reside in one area, in clearly marked folders. Unfortunately that is not the reality for many.

This past September, a handy application was launched that automatically organizes your photos. Called *Picasa*, it scans your hard drive and looks for all the photographs you might have squirreled away heaven-knows-where. Once *Picasa*, which just had a major upgrade to version 1.5, finishes scanning your hard drive, it provides a very easy-to-follow screen with all your photographs in front of you. The program lets you import images from most cameras, and now supports network drives to find even more images. Movies are now also supported.

From here you can do some very basic editing of your images, such as cropping, red-eye removal, simple enhancements and image rotation. Once you have picked the photos you like, you



can e-mail them, print them directly from the program or even organize them in a slideshow and add music. Unfortunately you cannot export the slideshow in any way. What you can do is export a group of photographs as an HTML page, although the options here are very limited and no customization is available. The pages generated by *Picasa* can be edited in most Web editing programs.

Picasa is a neat little program that will be welcomed by many amateur photographers. You can download a free 15-day trial from www.picasa.net.

Easy 3D slideshows

To create really cool slideshows simply

and, inexpensively, *3D-Album* is your ticket. It takes just three quick steps – select the folder you want, select a style of slideshow and select what type (application, screensaver, HTML start page, Zip or executable) of file you want.

There are more than 70 styles of slideshows – all of them in three dimensions, as the name of the software would suggest. There are also more styles becoming available on the application's Web site for free download. The styles can be customized slightly in animation speed, photo size, background and 3D headline text. Some of the styles have a built in interaction feature that has the presentation responding to keyboard, mouse or joystick input. The slideshows can be accompanied by music of your choice.

Where this package stumbles is in the organization and editing of the images. It has no built-in editor and relies on you to have a suitable application on your system. It will link to any photo editor though, allowing it to be opened inside *3D-Album*.

Clicking on the Organize button brings up the Photo Organizer screen. This is a somewhat stylized Windows

file browser, with the thumbnails of the photographs in the folders shown in one part of the browser. It is a bit cumbersome and not very elegant.

3D-Album is a fine program. The 3D effects are very smooth and professional looking. It does not require great resources to run and comes in 10 languages in the box. ♦

MORE INFO

Picasa
US\$29.99 (free 15 day trial)
Lifescape Solutions Inc.
www.picasa.net

Requirements:
300 MHz Pentium processor or better
Windows 95, ME, 2000, XP, 50 MB hard drive
space, 64 MB of RAM

3D-Album
US\$39.95
Micro Research Institute Inc.
www.3d-album.com

Requirements:
PC with 200 MHz or higher clock speed
Windows 95, 2000, ME, XP, NT 4.0, 64 MB
RAM with Windows 95, NT 4.0, 128 MB recommended; 128 MB RAM with Windows
2000, XP (256 MB recommended); 3D video
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Few new tricks in Quicken upgrade

By NESTOR GULA

The big push of this newly redesigned version of *Quicken* is that you can organize and take care of your finances quickly. It is easier to set up than any other version that I have used before.

Online services play an important role in *Quicken XG*. The basic package comes with a 12-month subscription to Quicken Online services — allowing you to download banking information, update stock and mutual fund prices, and similar features. This service usually costs \$6.95 per month and is available in different packages from Intuit.

This new package combines three previous versions (*Basic*, *Deluxe* and *Home & Business*) into one program. This is great if you are operating a small business out of your home.

I'm bothered by the reliance on online services. In the light of hard drives and information being lost by venerable financial institutions, I question the wisdom of putting the bulk of

one's financial information online. My other concern is the package itself. It looks great and works well, but if you bought a package a year or two ago, why do you need to upgrade? If you don't have a financial management package on your computer and are looking for one, then *Quicken XG* will work great. If you already have one, then it would probably be best to save your money. It will look better on the balance sheet. ♦

more INFO

Quicken XG
\$99.99
Intuit
www.intuit.ca

Requirements:
PC with 133 MHz (300 MHz recommended);
Windows 95/98/2000/NT/XP; 32 MB RAM (64 MB recommended); 97 MB free hard disk space;
2X CD-ROM (4X recommended); 256-colour SVGA monitor (16-bit colour is recommended); Internet Explorer 5.5 (included with program); Internet connection to use online features (14.4 Kbps minimum, 56 Kbps or higher recommended)

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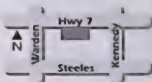
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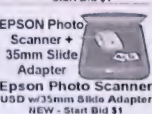
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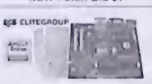
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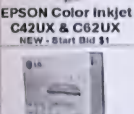
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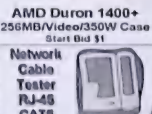
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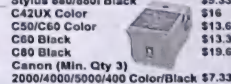
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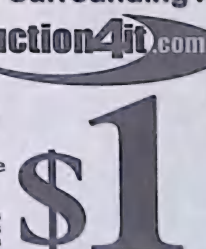
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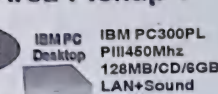


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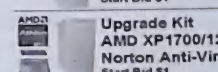
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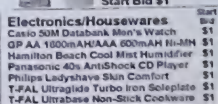
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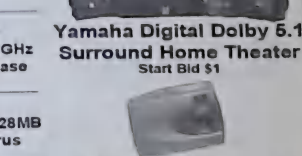


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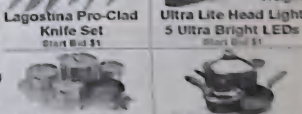
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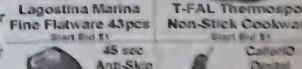
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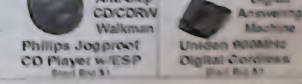
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FEATURE

By DWAYNE R. BROWN

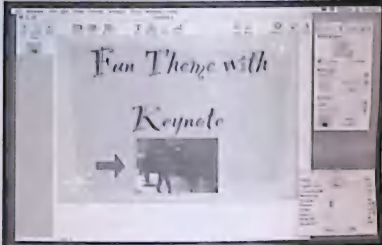
Keynote has come along at a time when Apple is striving to maintain not only its unique identity in the world of computing, but also at a time when uniqueness alone cannot pay the bills. Apple has clearly been paving a road to reach a wider mass of people for everyday home and business computing. The best way to do that is not by inventing, but reinventing. *PowerPoint* has been around for a long time, so Apple couldn't just throw out a package and hope for success. With *Keynote 1.0* Apple lays its familiar touch on software by stripping it down, making it intuitive, clean, reliable and — especially important for presentation software — polished.

When *Keynote* first opens, you'll notice that it's a lot cleaner looking than *PowerPoint*. After all, you don't need to be searching for the right tool while you're creating a presentation. The first thing you do is pick a theme. A theme gives a cohesive look and feel to your entire presentation. You can start from a blank slide and create your own theme or modify one of the existing 12 themes. Each theme consists of 11 master slides that are already laid out for titles, text, graphics and combinations of those elements.

Within an hour of first using *Keynote*, I had a 19-slide presentation set up with graphics, audio and all my text. How is that possible? *Keynote* is extremely drag and drop friendly. To add audio or video to a slide, you just find the file you want and drag it to the slide you want it to play on. A little speaker icon indicates that there is audio on that slide, but the icon does not show during the presentation. Video can be resized, and either media can be started or stopped just like any other build or can just start automatically when you reach that slide. It's that simple.

Graphics make full use of OS X's Quartz display engine. Again, dragging them into your presentation gives you full control over placement and resizing. Typically you'd expect some aliasing when you resize a graphic in a program like this, but not here. The graphics remain crisp and clear. To help place those graphics, there are "dynamic alignment guides." Whenever you move a text box, graphic or video file around the screen, alignment guides pop up to let you know that you are centred horizontally, vertically, or with another graphic.

Apple presents: Keynote 1.0



There's nothing worse than watching a presentation where the titles and bullets are doing the jig around the screen from slide to slide. These guides make sure that everything is aligned and that makes for a much better presentation.

Transitions are another area where Apple spent a little extra time. They are clean, smooth and very professional looking. One in particular, the cube, looks as good as any effect I have seen in a professionally done presentation.

The content and effects on each slide are manipulated through the inspector (a small window on the screen), which gives you control of text, transitions, builds, charts and graphics without having to go through the menu bar to find the right command. One last great idea the company threw in is the ability to save your presentation as an Adobe PDF file. While it doesn't retain all the effects, the content (along with graphics) will be readable by anyone with *Acrobat Reader*. Now that's smart.

Apple claims that *Keynote* was designed for Steve Jobs. See what happens when you're designing something for your boss — you do it right the first time. *Keynote* is pretty stripped down when compared to *PowerPoint*, but when all you want to do is give a good clean presentation to impress your clients, you don't need the world at your fingertips — only the pretty pictures. Get the word out — *Keynote* works. ♦

more INFO

Keynote 1.0.1

\$159

Apple

www.apple.ca

Exports and Imports to/from *PowerPoint*, and exports to *QuickTime* and PDF.

Requirements:

PowerPC G3 or G4; Mac OS X 10.2 or later; 512

MB RAM (recommended for smooth transitions)

52 MB Video memory; 1 GB of available disk space



Kevin Linfield

Linfield's
Line

Every morning before I go to work, I don't read the newspaper. I don't check out various news Web sites either. Instead, I use my PDA to take my daily dose of what's new and interesting with me. How? By using what I consider the best third-party piece of PDA software freely available — *AvantGo*.

For those who haven't discovered this gem, *AvantGo* is a Web capture and browsing service for both Palm and PocketPC PDAs. Quite simply, it is a means of taking Web content (pictures and text) and viewing it offline (or even online) on your handheld. It consists of two components: A browser/viewer for your PDA and software for connecting to the *AvantGo* Web site and downloading content.

Setting it up

To set yourself up with *AvantGo*, you must visit its Web site and sign up for an account. After choosing a login name and password, you will be able to

AvantGo is #1

download the software for synchronizing information, as well as the PDA software. Once you have configured your desktop and PDA, you are ready to select what content or "channels" you wish to have on your handheld. You can browse available channels based on category, goals or your location. I found that I had to be careful not to restrict my view to my current location, as only a small percent of channels are deemed to be Canadian. A nice touch is the ability to preview the channels online so you can see what they would look like on your PDA. Once you have selected your channels, simply use your desktop PC or a modem with your PDA to synchronize the content. You are now ready to obtain Web pages of information specifically formatted to be viewed on a small screen.

What's available?

Since there are millions of Web pages online, you may wonder which are available for offline viewing. Currently, there are 1533 channels available, divided into 12 categories: Automotive, Business/Finance, Education, Enter-

tainment, Health, Lifestyle, News/Media, Portal, Shopping, Sports, Technology and Travel. There is a reasonable number of channels with Canadian content, including CBC.ca, Canada.com, globeandmail.com and CTV.ca, which should be more than enough to keep you abreast of Canadian news. You can remove channels from your subscription list directly from your PDA, but to add channels you must log onto the *AvantGo* Web site.

What's the catch?

Is there anything wrong with *AvantGo*? Not really. Since it is a free service (for up to 2 MB) you do get minor advertising displayed on your PDA. However, all I have ever noticed is two small ads on the main page listing your channels. And of course, if you have a serial PDA and you subscribe to the maximum content, you will find it takes a few minutes to synchronize. Although I had to give them my e-mail address, I opted out of the mailing lists, and as far as I can tell, my information hasn't been sold.

So every morning I synchronize my

Palm with *AvantGo*. About two minutes later I have almost a megabyte of the day's news and information, which I can peruse throughout the day.

For anyone traveling, waiting around or with a few minutes of free time, you can get caught up on whatever information you want. This has to be the best freeware application for PDAs, bar none. ♦

Personal e-mail can be sent to linfield@rocketmail.com

more INFO

More information is available on the *AvantGo* Web site www.avantgo.com. I was pleased to read details on Linux (and other UNIX) support directly from the *AvantGo* website at www.avantgo.com/usa/mobile/unix.html.

Requirements

Palm, Windows CE, or PocketPC PDA with up to 2 MB free RAM, and an Internet connection on your Windows/Linux/MacOS desktop and/or PDA for downloading content. Free service for up to 2 MB of channel information (per synchronization), while users who want more content can pay US\$19.95/yr for up to 8 MB of channel information (per synchronization).

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Who are you?

Maybe I'm just getting old,

but knowing who you are used to be such an easy thing to figure out.

You had a name, a postal address and a phone number or two. If someone wanted to learn something about you, all he or she had to do was ask you (or someone who knew you).

Not only that, but who you were stayed more or less the same all your life. Sure, there were the standard decision points along the way, like the first forays into self-expression at age four or five, the agonized self-questioning in your early teen years, maybe even some semi-focused efforts to "find yourself" in early adulthood. But basically you were who you were, and that was that.

Enter the 21st century, computers and the Internet — and a whole new universe of definitions of identity, ways to express that identity and paths of dis-

covery.

Search engines are partly to blame for that — so much so that "Google" has become a verb as well as the name of the most popular search engine used these days. That usage is eerily illustrated in William Gibson's latest novel, *Pattern Recognition*.

Unlike Gibson's previous novels (though his last few have been tending in this direction), *Pattern Recognition* is set in the near-present rather than the future. The story takes place a year after the events of September 11, 2001 and features Cayce Pollard, a consultant who has a finely-tuned (one might say pathological) level of sensitivity to brand names, logos and the ways they influence markets. The novel's plot has

Cayce travel a lot, meet the usual crowd of Gibson-type corporate and technology lowlifes and come to terms with her father's involvement (and possible death) on September 11.

Along the way, people meet, talk and learn more about each other. And how do they do that? Via Google, of course.

"Who are you when I google you?" asks one character of another. At another point in the story, the narrator says, "When I googled him, I found ..."

Some of Gibson's fans are a little upset and disappointed with this novel, because its setting is in the present rather than the future. What's lost, certainly, are the nervous, edgy thrills that came with the very high tech and dystopian landscapes of his earlier

Sprawl trilogy novels (*Neuromancer*, *Count Zero* and *Mona Lisa Overdrive*). What's still there, though, is Gibson's fascination with how technology intrudes upon human life and how it shapes our interactions with each other. As usual, he's right on when it comes to identifying what's making us tick.

Think his use of "to google" is a little weird? Think again. In 2001 and 2002, the Pew Internet and American Life Survey looked at how people used Google and other search engines. Enough people used search engines (Google more often than others) to query their own names or someone else's, two patterns the Pew folks call "vanity" and "detective" searching.

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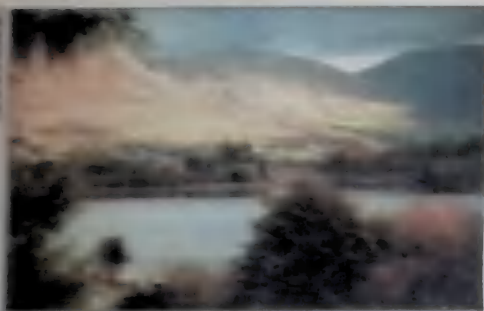
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Picture this: Image libraries online



By HAROLD LAGE

Whether you construct Web sites or just want a new desktop wallpaper, images abound online, many just for the grabbing. Be sure to read the fine print before you grab, though — not all photos are free. Many of those that are, however, require payment. But many sites will permit you to download and use images at no cost. Some sites allow a limited number of downloads or free use of a version in a lower resolution and some require a site credit. Best of all, whether you're a Mac or PC advocate, images don't care.

Yahoo! (gallery.yahoo.com) has an exten-



sive collection of photos in categories ranging from Animals to Travel. They also have a large number of news photos at STORY.

news.yahoo.com/news/impl-index&cid=705.

If travelling to the Middle East is a bit too hot to handle these days, you can always visit via pictures. Holy Land Photos (www.holylandphotos.org) features images from Israel, Greece and Turkey. Each database is preceded by a map that identifies the location of the shots.

Space Image Libraries (www.okstate.edu/oesp/image.html) links to photos of the International Space Station, past space flights, views of the Earth, Hubble Space Telescope shots, space craft and more.

There's an extensive collection at Library Spot Image Libraries

(www.libraryspot.com/imagelibraries.htm). One featured image collection link is to The National Geographic (www.national-geographic.com/media/photography). Stunning photos can be downloaded singly or used as your desktop background. The site also provides fascinating background to the photos and features material for kids. Another link at Library Spot is Dito.com (www.dito.com). It's a visual search engine. Just type the name of whatever image you're looking for and visit the results.

At FreeFoto.com (www.freefoto.com) there are a lot of photos — as long as they're for private, non-commercial use. All others must pay. What a collection. Just pick a category and drool. For instance, are you tired of the PowerPoint backgrounds you have to choose from? Hit the PowerPoint link, select a category and choose from a host of delicious backgrounds.

One place I visit frequently for images is Webshots (dailywebshots.com). You can either download their free software,

which grabs entire collections of their photos for you or right-click on your heart's desire to download it yourself or set it as your desktop wallpaper. The collection at this site never fails to amaze, and new images are constantly added. The shots at this site are free if downloaded at 800x600 resolution but cost at 1,600x1,200 resolution.

Just a word of caution. Overuse of images on a Web site or in a project can result in ocular overload. Go easy, choose the right image and let it speak volumes. ♦

more INFO

Canada Photos:
www.canadianculture.com/canphotos
Earth and Moon Viewer:
www.tourmalab.ch/earthview/planet.html
Google Image Search:
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A complete set of digital-quality studio and recording for the singer-songwriter. Edelrol's Home Studio provides you with everything you need to turn your PC into a powerful multitrack recording studio including: Sequencing, audio recording, real-time effects and software synthesis. Edelrol's Super Smart Play-A Software Synthesizer is included to provide you with the best possible piano, bass, guitar and drum sounds along with Edelrol's PC-30 USB Keyboard Controller to help you express your inspiration.

An outstanding package for RJA, producers and studios. Edelrol's Sound Studio 2.0 is a comprehensive and easy-to-use virtual studio that contains a powerful sequencer with 13 instruments for sound synthesis and sample manipulation. Also included is Edelrol's PC-30 USB Keyboard Controller, complete with 34 individual controllers — 25 fully assignable — and Edelrol's 3A-20 24-Bit Audio and MIDI I/O bus powered interface.

RULES AND REGULATIONS

1. You may submit up to three (3) original compositions. Each composition submitted must be your own original work. Compositions may not exceed five (5) minutes in length. A completed and signed application must accompany each entry. Contestants must submit all entries in MP3 format and burned on a CD. CDs will not be returned. Compositions previously recorded and released will be disqualified. Compositions using samples of previously recorded material will be disqualified unless accompanied by a release waiver from the original artist.
2. This contest is open to amateur unsigned acts. All genres of music will be considered. Employees and families of Toronto Computes!, its parent company, subsidiaries and affiliates are not eligible. Contestants must be Canadian citizens or have landed immigrant status.
3. Winners will be chosen by a select panel of judges and will be judged based on melody, composition and lyrics (when applicable). The quality of performance and production will also be considered.
4. The first place winner will have first choice from the prize pool. The second place winner will have the second choice. The third place winner will have the remaining prize.
5. By submitting compositions and the signed entry form to this contest the entrant claims that their composition is original work and he/she holds all rights to the composition. The contest also agrees to give Toronto Computes!, its parent company and subsidiaries the non-exclusive right to use the compositions for future advertising and publicity purposes without additional compensation for a period of two (2) years from the date of the contest's closing date.
6. All entries must be postmarked by 5 PM EST June 30, 2003. Winners will be chosen by July 15, 2003. Winners will be contacted for their choice of prize. Results will be announced in the August issue of Toronto Computes!
7. All decisions of the judges are final.

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Forget the windows ... clean the Apple

Dwayne R. Brown

Mac
Chronicles



Ahh, spring is finally in the air. And what's the first thing that comes to mind? Why, spring cleaning of course. There's just something in our DNA that compels us to re-arrange, re-organize and start afresh. Now, while this usually refers to our houses, apartments, lawns or vehicles, we mustn't forget that we do live in the wired age. Spring cleaning should also extend to our digital lives and by virtue of that — our Macs.

Anyone familiar with the PC knows that spring cleaning comes, seemingly, every few weeks. Whenever there is a conflict on a PC (heck, whenever a new application is installed) the standard procedure is to reboot and often let the OS run a scan of the hard drive to check for and correct any discrepancies with the startup instructions. This procedure

in itself over time causes a buildup of bad code. On a recent call-for-help type of tech show a caller asked, "What's the best way to keep my Windows XP computer in top running condition?" The host answered, "Don't use it." While amusing, it's certainly not the answer you want to hear.

Macs do have a better track record, but that doesn't mean that they aren't prone to failure. With a little preventative medicine, you can catch most of the problems before they occur.

What's in the supply closet

First up — use the tools you were given. Apple provides a basic disk utility with its OS called (are you ready for this?) Disk Utility. While it is accessible from the Applications/Utilities folder in OS X, the best way to run it is from the Mac OS CD-ROM. The reasoning is that without the OS running, the program can check all files and folders without fear of causing problems. OS X is especially particular about allowing access to system files while they are in use. First Aid in the Disk Utility module will verify disk permissions and repair them

where required. This is your first line of defense.

If you think Mr. Clean does a good job on your kitchen floors, wait until you try the freeware MacJanitor. I have yet to find a Web site that doesn't recommend this piece of software. Even Apple lists it in its knowledge base. The big secret about MacJanitor isn't its complex code and amazing prowess — it's the simplicity. All MacJanitor does is tell your Mac to execute script that it would normally run anyway. Apple built a few little applications into its OS that run around in the wee hours (between 3:15 and 5:00 AM) and clean up log files, check system files and do some general clean-up. The problem is, most people don't leave their computers on overnight. And if it isn't on, it won't run. MacJanitor is just a manual way to start these scripts. It's quick, painless and deserving of the "ounce of prevention is worth a pound of cure" line.

Hiring extra help

Bring on the big guns. Perhaps one of the biggest reasons that Macs have enjoyed such a stable track record is due

in part to strong re-sellers. Alsoft's DiskWarrior and Sonnet's SystemWorks 2.0 are extremely inexpensive tools to help out. These products can do everything from creating master

continued on page 43

more INFO

For instructions on running the First Aid Disk Utility, look to Apple's Customer [16224a](http://16224a.apple.com/support) document. The document also describes other start-up procedures if you're running into problems.

MacJanitor can be found all over the Web from a Google search to author Brian Hill, who answers many questions about MacJanitor in several online forums.

Symantec's SystemWorks 2.0 info can be found at www.symantec.com.

Alsoft's DiskWarrior info can be found at www.alsoft.com.

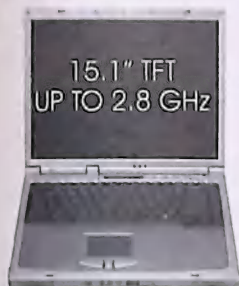
Aladdin's Spring Cleaning info can be found at www.aladdin.com/springcleaning.

Requirements for the above products vary and can be found at each company's Web site. Be sure to fully read for each piece of software because when you start to work with disk utilities, unexpected results can occur if you're not careful.

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Weirdness abounds on auction site

By GEOFF MARTIN

The past month was a strange one indeed on eBay.com, the popular auction site.

It all began when Hawaiian Navy officer Mike Evans bought a bag of Cheetos snacks and discovered a massive orange chunk of what the Frito-Lay company has speculated is cheese seasoning that collected in one of their processing machines and escaped the scrutiny of their usually eagle-eyed employees.

On a lark, Evans put the monstrous Cheeto (which is slightly larger than a golf ball) up for auction on eBay, but when the popular silly news site Fark.com linked to the auction, its equally silly fans quickly bid the item up to \$99 million before it was pulled by eBay watchdogs. Evans was eventually convinced to donate the freakish snack to an Iowa radio station, after it agreed to raise money for a local food bank. After raising US\$1,600, the Cheeto found a permanent home as a "tourist attraction" in a local restaurant and was unveiled on live television thanks to ABC TV's late-night newcomer Jimmy Kimmel Live.

The Cheeto has since taken on a life of its own, with some going so far as to offer commemorative "Giant Cheeto" t-shirts in separate eBay auctions. Next up is another late-night host, Conan O'Brien, who was "cheesed" recently to find an eBay auctioneer offering unauthorized reproductions of a fictional state coin used in a *Late*

Night With Conan O'Brien comedy bit. (The coin, which was a comedic jab at former US President Bill Clinton's home state of Arkansas, cannot be shown without offending at least some of our readers, as it portrays Clinton and a female companion engaged in what was purportedly a popular White House pastime.)

O'Brien obviously wasn't happy that no credit was given to his show or its graphic designer, and so on consecutive nights he trotted out the bashful artist responsible for the original coin to read expletive-laden legal threats from a cue-card.

And finally, we have the just plain weird.

Former teen pin-up and locally-born actor Corey Haim, who starred in such '80s movies as *Murphy's Romance* and *The Lost Boys* before running into heaps of trouble with cocaine and other drugs, recently offered a personal phone call to the winning bidder of an eBay auction. The auction was offered through Haim's official Web site and trumpeted,

"One lucky winner will get the chance to talk one-on-one with one of their favourite stars!"

The item found itself the subject of a minor bidding war (well, 32 bids, to be exact), and was eventually won with a final bid of US\$455.

Haim recently moved home to Toronto from Los Angeles and insists he has been clean and sober for a while now, so we trust the money will be put to good use.



Cowpland dusts off law books

Michael Cowpland, the founder and former CEO of Ottawa-based Corel, has decided to defend himself against insider trading charges in order to save money on legal fees.

That's right, the man whose wife once caused an international stir by showing up at a Corel gala wearing a dress valued at more than \$1 million (thanks to a breastplate made of solid gold and a diamond "nipple"), and whose former company bled hundreds of millions of dollars during his tenure, is actually trying to save money.

Cowpland is facing a regulatory hearing by the Ontario Securities Commission that is set to begin next month, after his personal holding company MCJC Holdings Inc. was accused in 1999 of selling more than \$20 million in Corel stock in 1997 with the knowledge that Corel was about to miss earnings forecasts. When the company's actual earnings were revealed, Corel's stock tanked sharply and Cowpland is alleged to have avoided some \$5 million in losses thanks to the timely trade.

Cowpland now says that he's tired of dealing with the long-standing legal mess and that it makes perfect sense to defend himself, since he feels the facts are fairly straightforward. He's also explained that he would prefer to invest in his new wireless company, Zim Technologies, rather than fill the pockets of corporate lawyers.

It's been said a million times before, and so surely Mr. Cowpland has heard the following phrase by now: "A lawyer who defends himself has a fool for a client."

But it's also been said that "A fool and his money are soon parted," and so it would appear that Mr. Cowpland has unfortunately found himself in a lose-lose situation.

We wish him the best of luck. ♦

High-tech dispute settled by low-tech means

Corporate lawyers in New Zealand apparently weren't faring any better than their Canadian brethren last month, as two New Zealand high-tech bosses agreed to settle a potentially ugly legal dispute with a friendly best-of-three arm-wrestling match.

The match was born after a dispute between New Zealand telecom companies TeamTalk and MCS Digital failed to be resolved by a local competition commission and was about to lead to litigation. The dispute revolved around MCS Digital's desire to access TeamTalk's mobile radio network, and was worth about \$150,000. Once it was clear the nine-month-old case was only going to be settled in a courtroom, TeamTalk CEO

David Ware simply rang up MCS Digital boss Allan Cosford and suggested that the two settle their differences like men with an old-fashioned arm-wrestling competition.

Cosford agreed, and the match was on.

Ware came out strong and took the first match, but Cosford eventually

prevailed by winning the next two. Afterwards, the two combatants, along with the 60-or-so friends and colleagues who ventured down to the local boxing club to cheer them on, mingled over beer and snacks.

In times like these, we can only hope that more people can take to heart the simple lessons taught by these two amiable and reasonable men.

(Incidentally, if Prime Minister Jean Chrétien and US President George W. Bush ever decide to settle a cross-border trade dispute with a friendly game of Rock, Paper, Scissors, it would be in our leader's best interests to take paper every time, since it's likely that his counterpart will have trouble counting to three, and will wind up showing rock nine times out of 10.)



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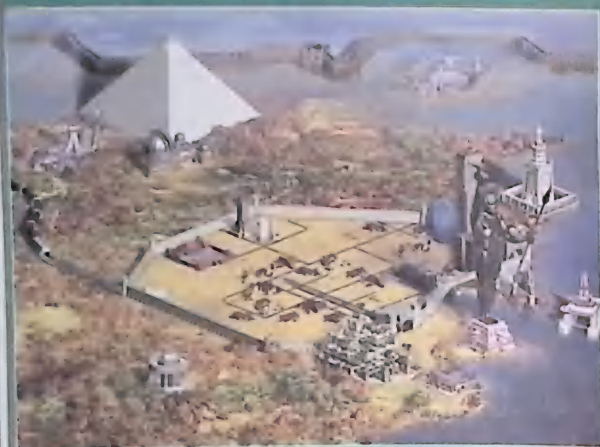
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CYBERPLAY

Civilization III: Play The World



By CHRIS TALBOT

Even though *Civilization* fans didn't have multiplayer capabilities out of the box with *Civilization III*, they now have their wish with the *Play The World* expansion—but it is too little, too late?

The biggest attraction to *Play The World* is the Internet, LAN, hotseat and play-by-e-mail features, which allow would-be world leaders to conquer their friends in the popular turn-based strategy game, but there are other goodies as well, including eight new playable civilizations (including the Celts, Scandinavians, Mongols and Carthaginians), new play modes specific to multiplayer games (simultaneous and turnless) and a scenario editor that will help players to create scenarios based on various time periods, including Feudal Japan and World War II. Players can even use the editor to create fantasy scenarios that, say, take place in prehistoric eras.

Civilization fans can whine until they're blue in the face that multiplayer should've been included in *Civ III*, and maybe it should have been, but the simple fact is *Play The World* is a good expansion pack with more than just multiplayer features. However, the multiplayer does have a few bugs. The multiplayer setup screen seems to like to reset every-

thing to default on a whim, so before launching a game, players should make sure the game hasn't reset changes back to default. Also, a major glitch happened during our first play-by-e-mail attempt. Two players and a full complement of AI civilizations were activated, but player two's commands weren't processed. The game was restarted and the problem seemed to correct itself. Also, the game refused to let us set up a play-by-e-mail game on any difficulty higher than Chieftain, the easiest setting.

Overall, the new civilizations are fun to play and the multiplayer functions add a lot of replayability to the game. Of special interest to strategists who don't have the time to sit down and play a game out with a buddy is the play-by-e-mail option. Of course, the game is slow going and for the first 20 or so turns there's almost nothing to do but click on "End Turn."

more INFO

Civilization III: Play The World
\$47.99
Infogrames
www.civ3.com



Requirements:
Pentium II 300 MHz processor, 32 MB of RAM, 675 MB of hard disk space (plus 50 MB for the swap file), 4X CD ROM drive, DirectX 8.0-compatible video card that operates at 1024x768 resolution

O.R.B.: Off-World Resource Base

By ANDREW POTICHNYJ

Is harvesting resources your thing? Well, *O.R.B.: Off-World Resource Base* is a 3D real-time strategy game in which players fly around in space and do exactly that. The resources you collect from these asteroids become useful as you to build military power and conquer enemies.

If, like me, you are not much of an experienced space explorer, *ORB's* tutorial mode will definitely get you on your feet. It teaches everything from basic ship-building to military conquest. You will learn how to keep all of your resources in check, how to manoeuvre your fleet and how to use the very complex, yet very cool, 3D camera, which allows you to see all angles of your ship.

The training sessions is a little bland, with minimal special effects, standard explosions and a lacklustre concept. But don't give in to the temptation to quit. After the training run is done, you are compensated with wonderful graphics,

huge and powerful explosions and a series of very helpful menus.

Once you begin playing real missions, you will discover that your enemies, who are mining for the same asteroid resources that you are, have the upper hand in battle. And they will, more likely than not, always win. It takes a bit of practice, but in due time you will become a first-rate space fighter and will pose a solid challenge to your opponents, which may be either online players or the computer.

One tricky aspect of *ORB* is controlling your fleet of miners, fighters, freighters and bases, all while still exploring for more resources. Meanwhile you are battling enemy aliens. Once again, a few practice missions and a solid run-through of the training sessions will take you a long way.

As the game progresses and you begin to master the controls, you will come to appreciate the excellent graphics and

soundtrack that this title features. Because of attributes like the very helpful drop-down menus, the huge fiery explosions and a fabulous multiplayer mode, you will find yourself more inclined to stay with this game.

Have we been here before?

The game's concept leaves a little to be desired though, as this is basically the same old space story seen in other games of this genre, where two races battle over resources, which are used to improve technology and eliminate the other race.

On the other hand, the game's soundtrack is a work of art. The music moves along with the game and accompanies the current play situation very appropriately. It really adds to the deep space feel of the game.

One aspect of the game that I really did not enjoy was the fact that on any given mission, only a few asteroids were available for mining and the rest were just barren lands with no value. This meant that for much of the game, I was struggling with low resource levels, wearing out my mouse pad trying to find that needle-in-a-haystack that held

some value for the fleet. It was hard to research everything on the map and still maintain a fighting force that could challenge any opponent.

When bored of the single player mode, you can switch to multiplayer and set up your own game, which allows you to decide on the number of resource-holding asteroids and customize your own ships. This eases the frustration of not being able to find many valuable asteroids during missions.

All-in-all *Off-World Resource Base* is a good game with a mediocre plot. This title would appeal to serious sci-fi fantasy enthusiasts and real time strategy fans, and is worth checking out if only for the graphics and sounds. ♦

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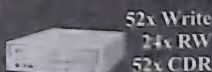


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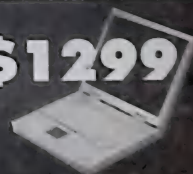
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By CHRIS TALBOT

Last year's *PlayStation 2* hit about midwest turf wars in a fake Florida city during the '80s will be coming to PC this spring. *Grand Theft Auto: Vice City*, another failure about a year on the heels of the popular *Grand Theft Auto III*, has been selling well on PS2, and for good reason. The game stars a cast of Hollywood actors voicing characters throughout the game, lending a mob movie-like feel to the controversial game series.

Smirring as the voice of ex-con Tommy Vercetti is crime movie veteran Ray Liotta. Vercetti has just been released from a 15-year prison sentence and immediately jumps back in the game. His Liberty City boss (Liberty City is the name of the municipality in *GTAB*) sends Vercetti south to look after a deal that quickly sours, leaving Tommy without his boss's cash or the product he was buying.

The conversion of GTA3 from PS2 to PC last year was very good. It added a new targeting system perfect for mouse-and-keyboard players, as well as the ability to add MP1s to the game to act as a radio station (while driving around the city, players can tune into various radio stations — and developer Rockstar North licensed some old 1980s pop tunes for Vice City).

While details are still a little sketchy about changes to *Virt City*, gamers can probably expect the gameplay to be similar to that of the PC version of GTA3.

Page of 10 pages

With *Age of Mythology* will
live in the minds of real.

time strategy game players. Microsoft is preparing to bring another RTS game to stores this month.

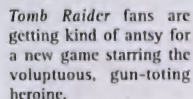
Rise of Nations, currently in the final phases of development and beta testing by Big Huge Games, is another historical strategy game beginning in the ancient world and moving into the modern world. The *Age of Empires* games, developed by Ensemble Studios and published by Microsoft, have a similar start in the ancient world but leave off at the end of the Middle Ages. According to Microsoft, *Rise of Nations* will begin in the Stone Age (like most historical RTS games) and end in the Information Age, which is a similar timeframe to the one found in the *Civilization* series of turn-based strategy games from Firaxis. The similarities between *Rise of Nations* and *Civilization* shouldn't come as a surprise, since the lead designer, Brian Reynolds, worked as a designer on *Civilization II*.

The final version of *Rise of Nations* should have 18 playable nations: Aztecs, Bantu, British, Chinese, Egyptian, French, German, Greek, Incan, Japanese, Korean, Mayan, Mongolian, Nubian, Roman, Russian, Spanish and Turkish) and will allow up to eight people to connect via a LAN or the Internet.

to play together. A scenario editor is also expected to be included when *Rise of Nations* ships.

Tomb Raider: Angel of Darkness

The next chapter in the Lara Croft saga has been delayed far too many times, and



We thought we were going to see *Tomb Raider: Angel of Darkness* last fall, but the last we heard, the new game was supposed to be out in March. Eidos public relations staff still hadn't been informed of a release date though, and the official Web site is listing *Angel of Darkness* as having a



One new feature to the game is the ability to talk to other characters in the game, which should add some role-playing aspects to the series. Also, according to the Eidos Interactive Web site, the developers have created a new game-play system. We should be seeing this on store shelves anytime now. ♦

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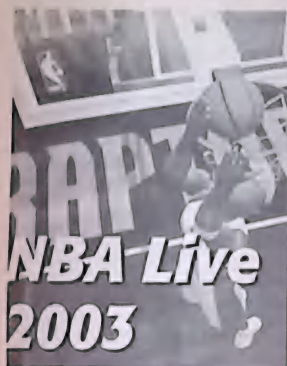
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CYBERPLAY

NBA Live 2003

By TED KRITSONIS

After taking a year off from the hardcourt for the PC, EA Sports has come back with *NBA Live 2003*.

The game's controls have been overhauled to give gamers the option to use both hands, so you can make quick steals, huge shot blocks and crossover dribbles. The animations have also been changed and hundreds of new ones added, including animated coaches in 3D throwing fits at players. Certain players have specific moves, but they have to be unlocked.

The PC version of *Live* offers the same modes — Practice, Exhibition, Season, Playoffs and Franchise — that its console counterparts do, but the online capabilities are what set it apart. You can create clubs for small tournaments, check stats and even make trades with other gamers.

It seems EA paid a lot of attention to detail in the graphics and sound, as they're a great improvement. Players are very recognizable based on their real-life skintones, something sorely lacking in many b-ball games.

The gameplay isn't as realistic as it should be though; blocking shots is too easy and games can easily reach 90 or 100 points with five-minute quarters. Superstar players can almost do whatever they want. Sure, they're great players, but they're not superhuman. ♦

more INFO

NBA Live 2003
129.99
EA Sports
www.ea.com



Requirements:
700 MHz or faster Intel Pentium III or AMD Athlon processor; 256 MB or more RAM; 1x or faster CD ROM/DVD ROM drive; 700 MB free hard disk space; 32 MB or greater supported Hardware Transform & Lighting capable video card; DirectX 8.1 compatible GamePad with at least 10 buttons and two analog sticks.

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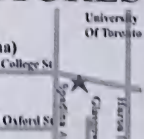
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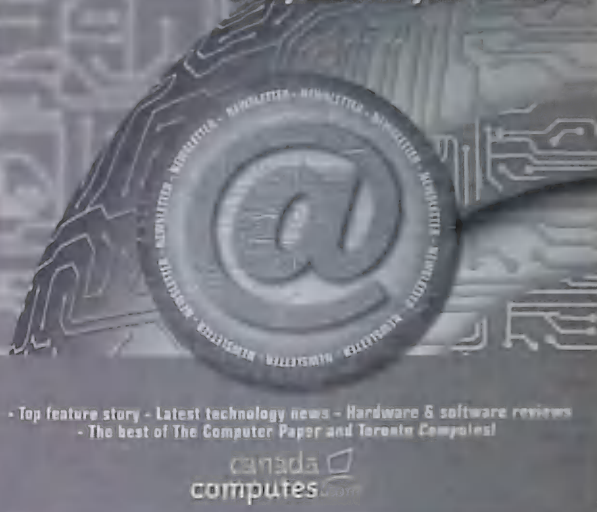


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Shopping for a new computer game can be an irritating experience for those who on cash or for gamers whose PC may not be fast enough to run the latest titles. Thankfully, many software retailers devote a small section of their floor space to "bargain bin" games.

If you look hard enough, you can find some hidden gems buried deep below the bottomless pile of crummy deer hunting simulations. The following are just a few of the best dirt-cheap PC titles available for under a cool \$10. Prices may vary slightly among retailers.

Diablo
Blizzard Entertainment
\$8.99
Rating: Mature
www.blizzard.com/diablo

Heralded as one of the most influential fantasy role-playing games (RPGs) of our time, Blizzard's *Diablo* combined fast-paced hack-and-slash gameplay with a flawless user-interface and something quite revolutionary for the time: Multiplayer matches over the Net that could be launched with a mouse-click.

To find and destroy the all-powerful demon, Diablo, gamers choose to play as one of three character classes — the warrior, the rogue or the sorcerer — before traversing through subterranean dungeons and a war-torn town.

Despite its 640x480 graphics, *Diablo* still looks great in 2003, including the stunning cinematic cut-scene movies.

Myst Masterpiece Edition

Ubi Soft
\$6.99
Rating: Everyone
www.riven.com

Consider this game a "director's cut" edition of the classic Mac and Windows surreal adventure from the mid-'90s.

The original *Myst* — which, by the way, was one of the very first CD-ROM games — placed the player alone on an

island shrouded in mystery. By solving puzzles, reading clues and journeying to various "ages," the gamer slowly unraveled an enlightening tale of injustice.

This "Masterpiece Edition" features a graphical overhaul (now in 24-bit colour), higher-quality movies and animations, digitally remastered music, and an integrated help guide that can assist players who are stuck on tough puzzles.

Myth II: Worlds — The Definitive Myth II Collection

Take-Two Interactive
\$6.99
Rating: Mature
www.take2games.com/myth2worlds

Myth II is a tactical war game with a

fantasy twist.

This 3D sequel continues where its best-selling predecessor left off — the player is in control of powerful armies in a bloody battle between good and evil, human and inhuman. Battles take place on huge indoor and outdoor maps.

This three-CD set contains the complete *Myth II: Soulblighter* game, more than 50 new solo levels and dozens of multiplayer maps, loads of new characters, the official *Myth II* strategy guide in electronic format and a map editor for creating your own playable levels.

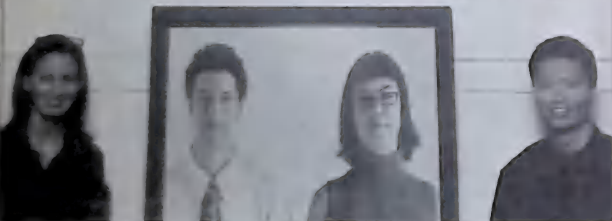
Still bargain hunting?

Other great bargain bin picks include Strategy First's *Kohan: Immortal Sovereigns - Game of the Year Edition* (\$8.99; www.strategyfirst.com), Take-Two Interactive's *KISS Psycho Circus: The Nightmare Child* (\$4.99; www.take2games.com), Ubi Soft's *Rainbow Six Covert Ops Essentials* (\$9.99; www.ubi.com), Infogrames' *Alone in the Dark 4: A New Nightmare* (\$9.99; www.infogrames.com) and Take-Two Interactive's *Serious Sam* (\$8.99; www.take2games.com). ♦



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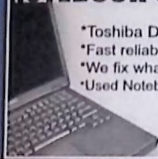
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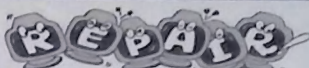
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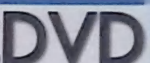
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AD INDEX

2000 Computer	22	eSkynet.com	19
24/7 Tech Corp.	53	GoGo Computers	18
A&T Hosting Suite	5	Greacom Computers Inc.	42
Aaronic Technology	32	Grey Tech.	34
ABC	25	Hitech Classifieds	48
AG Computers	38	Hitech Institute	48
Angel	41	Infonec	39
Apple	8	Keit	16
ASI Technologies	38	LG Electronics	3
Auction4it.com	33	Logic Computer House	26
Bell Sympatico	55	Look	17
BNC Computware	9	Magma Communications	11
CanadaSys	37	MDG Canada	12
CBL Data Recovery	53	Merchant Guy	53
Certification Express	49	Micropoint	30
Classifieds	52	Monitor Plus Inc.	53
ComNet Services	53	Monitor Repair Centre	53
Compu Canada	47	Network Universe	53
Computer Square Inc.	33	Overseas Video Lab	53
Computer Warehouse Outlet	20	PAGE BYTES	32
ComputerFest 2003	32	Pathway	15
Computers & Peripherals	24	PC Maniak	49
Cool Tunes Contest	40	PC Village	51
CRS Computer Rentals & Service	10	Photo Spree	45
Cybernet Communications	31	Premier Computer Canada	7
Dell Canada	56	Summit Direct	28
Digital Design	54	Ubisoft Rainbow Six	50
DSG	43	Winnet Systems	49
Echo Online	2	Work IT	50
Eden Production	53		
Elosoft	36		

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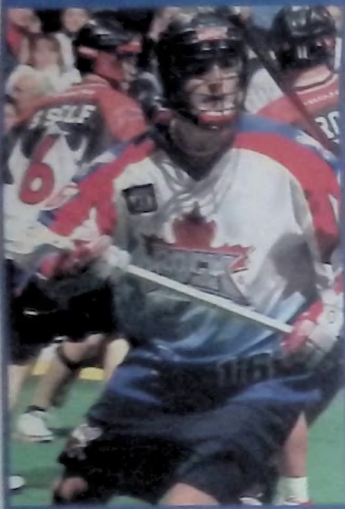


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Profile: Blaine Manning



Toronto Rock forward Blaine Manning plays lacrosse – otherwise known as the little sport that could. Before there was hockey, there was another “Canada’s game,” played with sticks and nets, speed and heart, just like that ballet on ice. Well, minus the ice. Nevertheless, lacrosse appears to have come out of nowhere, its popularity supporting a 12-team North American league, television exposure and filling the Air Canada Centre with over 15,000 patrons per game.

“It’s a great sport – it’s very exciting,” says Manning, 23. “Canadians can relate to it because it’s much like hockey. It’s played in the same dimensions of the rink and it’s affordable.” The Sherwood Park, Alberta-born native and graduate of Radford University in Virginia is only in his second season with the Rock and says he sees nowhere but up for the team and the league. This despite heavy competition from mainstream sports franchises like the Toronto Maple Leafs and the Toronto Raptors.

“There’s a market throughout North America for it as an affordable family sport,” he says. “It’s just a matter of finding the formula for success. We need to find exactly where we fit in the sports scene – we’re obviously

not the big-time, big-money sport. But some fans come up to me and tell me they’re happy to finally see a winning team in Toronto.” That’s a sentiment this city hasn’t been able to express for some time. Currently first in their division, Manning expects the team to be in the race for the Champions Cup come April. “We have a good team so ultimately we’d like to be in the final.”

Who: Blaine Manning, forward, Toronto Rock Lacrosse Club.

Computer now used: IBM PC.

Computer first used: “Probably in 4th grade, we had a computer lab and I’m not sure what was in there but they were pretty funky – I think they were Apples with the old floppy disks. You got to play the games on them.”

Favourite computer: Dell laptop; “It’s pretty amazing what you can do with one of these things.”

Other technical gadgetry in use at this time (cells, PDA, etc.): Samsung cell phone.

Do you use your computer for play? No.

Best thing about the technology you have: “It has to be convenient. The computer being able to access any type of information on the Internet is huge for my day-to-day life.”

Worst thing: [Chuckles] “I don’t understand it. When there’s a problem or a glitch with the computer I’m helpless. I need to call somebody in because I really just don’t understand them all that well.”

What can’t you live without? Computer; “As far as the business world, you need a computer. You can’t really do a whole lot without one.”

Is there anything you think you need? Palm Pilot.

Personal take on issues dealing with technology in general: “I think technology is a great thing. It’s always helping make life easier for everyone. So I think the more research, the more things they come out with, the better off we’re gonna be. I don’t think you should ever be at a standstill or be complacent with what you have.” ♦

-interview by Samson Okalov

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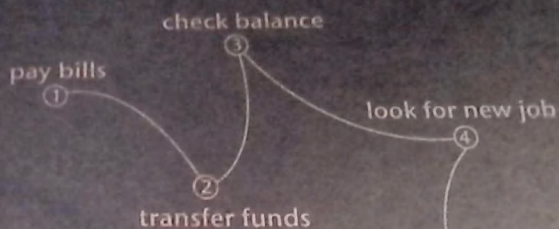
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